

REMARKS

Claims 1, 3-22, and 24-42 remain pending in the present application and stand rejected. Claims 1, 4-14, 20-22, 25-32, 34, 35, 41, and 42 are herein amended. No claims have been canceled or added. Applicants respectfully submit that no new matter has been added to the application by the Amendment.

Telephone Conversation With Examiner

Applicants' representative thanks Examiner Reza for the telephone conversation conducted on January 7, 2008. Applicants' representative and Examiner Reza discussed the rejections under 35 U.S.C. § 112. Applicants' representative and Examiner Reza discussed how the term "x" was being used in the claims. To avoid confusion when interpreting the claims, Applicants' representative agreed to use the phrase "specific number" rather than the term "x". Applicants' representative stated that in view of the claim amendments, the rejections under 35 U.S.C. § 103 were rendered moot.

Claim Rejections - 35 U.S.C. § 112

Claims 1-42 are rejected under 35 U.S.C. § 112, second paragraph, for multiple reasons. Applicants again respectfully traverse the Section 112, second paragraph rejection.

In the instant Office Action, it is argued that there is no support in the specification for "obtained information being ... selected from a group consisting of a hardware identification (HWID) generated for the computing device based on one or more identifications of hardware of the computing device" as recited in claim 1. Applicants respectfully disagree.

As described throughout the specification, a state store such as that recited in the claims has sensitive data therein and is stored on a computing device. Notably, inasmuch as the data in the state store can be valuable, such state store is stored on the computing device in an obfuscated form such that the data is not easily read by any nefarious entity. Thus, as part of the effort to achieve such obfuscated form, such data store is broken into multiple parts and stored in multiple locations on the computing device. To increase such obfuscation,

the name of each of the multiple locations, including the path and file name thereof, is itself obfuscated. Thus, each such path and file name is pseudo-randomly generated.

Note, though, that to allow the pseudo-randomly generated paths and file names to be reproduced, such items are generated according to identification information relating to the computing device that cannot easily be changed, such as for example a hardware identification (HWID) of the computing device or a time at which an operating system of the computing device was installed. Moreover, in order to prevent the generated paths and file names from being reverse-engineered, such items are generated based on a one-way function, such as a hash function or the like, that receives the identification information relating to the computing device.

More specifically, independent claim 1 as amended now recites that, to store a state store having state information therein on a computing device, information substantially unique with regard to the computing device is obtained from such computing device. Such obtained information is generally non-changing and is selected from a group consisting of a hardware identification (HWID) generated for the computing device based on one or more identifications of hardware of the computing device, and a specific time associated with the computing device. A specific number is selected, where the specific number is a number of locations at which at least a portion of the state store is to be stored. Thereafter, the specific number of pseudo-random file names and the specific number of corresponding paths are generated based at least in part on the obtained information by applying a one-way function to data including the obtained information, and the resulting output of the function is employed to define the file names and the paths.

Thus, the generated file names and corresponding paths are likewise substantially unique to the computing device. The specific number of generated file names and the specific number of generated paths are respectively paired to form the specific number of locations on the computing device, and the state store is stored on the computing device according to the specific number of formed locations on the computing device.

Independent claim 22 as amended recites subject similar to that of claim 1 as amended, albeit in the form of a computer-readable medium.

In the instant Office Action, it is argued that the use of the term “x” in the claims as representing the number of locations, file names, and paths causes the claims to be indefinite inasmuch as x is not further defined or even limited. In view of the claim amendments, it is submitted that this argument is moot.

Also, it is argued in the instant Office Action, that the term ‘at least nearly’ as used in connection with ‘unique’ gives rise to indefiniteness. Applicants have amended the term to be ‘substantially unique’. Accordingly, Applicants respectfully submit that the claims as amended are definite.

Further according to the Examiner, the term ‘consistently obtainable’ is indefinite. Accordingly, Applicants have deleted the term.

Thus, Applicants respectfully request reconsideration and withdrawal of the Section 112, second paragraph rejections.

Claim Rejections - 35 U.S.C. § 103

The Examiner has rejected the claims of the application under 35 U.S.C. § 103 as being obvious over de Jong et al. (U.S. Pat. Pub. No. 20050069138) in view of Johnson et al. (U.S. Pat. Pub. No. 20030163718). Applicants respectfully traverse the Section 103 rejection insofar as it may be applied to the claims as amended.

As the Examiner again notes, the Johnson reference discloses, primarily at paragraphs 0043-0046, that data may be stored by being dispersed to a number of locations on a computing device by randomly assigning actual addresses to virtual addresses. However, such actual and virtual addresses are not set forth in terms of file names and paths, and in fact the Johnson reference does not even suggest or disclose the use of file names and paths, let alone the use of such file names and paths in the manner recited in claims 1 and 22. Thus, the Johnson reference does not teach or even suggest the use of paths and file names as is required by claims 1 and 22. Moreover, the Johnson reference does not teach or suggest that the data is a state store that is to be obfuscated, as is also required by claims 1 and 22.

Although the Johnson reference does teach the use of a hash function to generate the actual address, the input is a virtual address. Thus, the Johnson reference does not likewise teach or suggest that the input to the hash function is obtained information that is generally

non-changing and is a hardware identification (HWID) or a specific time associated with the computing device, as is required claims 1 and 22.

Nevertheless, the Office Action points to the de Jong reference as disclosing obtaining information that is at least nearly unique to a computing device. The de Jong reference discloses obtaining a target ID from a computing device and employing same to obfuscate an application program that is to be delivered to the computing device. Such target ID can be a VM ID, which is presumably an identification of a virtual machine operating on the computing device, and thus by its nature such VM ID is not a hardware identification (HWID) or a time as recited in claims 1 and 22 but instead is a software identification.

Moreover, the de Jong reference discloses at about paragraph 0109 that the target ID obfuscates a file or the like to be delivered to the computing device by cryptography (encryption) such that an encryption key for encrypting the file is derived from the target ID. Thus, the de Jong reference like the Johnson reference does not disclose or even suggest that the target ID or any other ID be employed to generate file names and paths in the manner recited in claims 1 and 22.

Applicants respectfully submit that both the Johnson and de Jong references fail to teach or suggest that a specific number is selected, where the specific number is a number of locations at which a state store is to be stored on a computing device, and that based on such specific number a like specific number of file names and a like specific number of paths are generated, that respective ones of the generated paths and file names are paired to form the locations on the computing device, and that the state store is stored in such formed locations, all in the manner recited in claims 1 and 22.

Thus, and for all of the aforementioned reasons, Applicants respectfully submit that the combination of the Johnson and de Jong references clearly does not make obvious the invention as recited in claims 1 and 22, or in any of the claims depending therefrom including claims 3-21 and 24-42. Accordingly, Applicants respectfully request reconsideration and withdrawal of the Section 103 rejection.

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In view of the foregoing amendment and remarks, Applicants respectfully submit that the present application including claims 1, 3-22, and 24-42 is in condition for allowance and such action is respectfully requested.

Respectfully submitted,

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